

CZECHOSLOVAKIA

SIMEK, J., LEJSEK, K., SEDLACEK, J., MELKA, J., HAIS, I.M;  
Chair of Physiology, Chair of Medical Chemistry, Chair of  
Experimental Physiology, Medical Faculty, Charles University,  
(Katedra Fysiologie, Katedra Lekarske Chemie, Katedra Experiment-  
alni Fysiologie, Lek. Fak. KU), Hradec Kralove.

"Respiration Metabolism of Sections and Succinate Oxidase Activity  
of Isolated Mitochondria in Livers of Rats of Different Ages After  
Partial Hepatectomy."

Prague, Ceskoslovenska Fysiologie, Vol 15, No 2, Feb 66, pp 130-137

Abstract: Experiments conducted on 36 male rats aged 3 to 24  
months are described. Partial hepatectomy resulted in an increase  
of oxygen consumption, the succinate oxidase activity was  
decreased. Older rats that underwent a removal of 65-70% of  
the liver were able to modify their energy and material metab-  
olism to such an extent that a nearly normal liver regeneration  
took place. 1 Figure, 5 Western, 1 Czech reference. Submitted  
at the Full Meeting of the Physiological Section of the Czecho-  
slovak Medical Society of J.E.Purkyne at Hradec Kralove, 8 Sep 65.

1/1

CZECHOSLOVAKIA UDC 612.014.481.1:612.82.015.2(547.964.4157.475.2)  
-088:612.82.015.2-088

TOMANA, M.; HAIS, I.M.; SIMEK, J.; Institute of Chemistry and Biochemistry, Medical Faculty, Charles University (Ustav Chemie a Bi-  
ochemie Lek. Fak. KU), Hradec Kralove, Head (Prednosta) Dr I.M. H  
HAIS; Physiological Institute, Medical Faculty, Charles University  
(Fyziologicky Ustav Lek. Fak. KU), Hradec Kralove, Head (Prednos-  
ta) Prof Dr J. MELKA.

"The Role of the Pituitary in Changes of the Ascorbic Acid and  
Glutathione Level in the Brain of Rats During the First 24 Hours  
After X-Ray Irradiation."

Prague, Casopis Lekaru Ceskych, Vol 105, No 30, 15 Jul 66, pp  
812 - 815

Abstract /Authors' English summary modified/: After whole-body  
irradiation with a dose of 600 r no changes were observed in in-  
tact rats; the brain of adult and 6 day old rats who underwent  
hypophysectomy showed a decreased content of ascorbic acid and of  
glutathione. No changes were observed when ACTH was injected in-  
traperitoneally into non-irradiated rats. It seems that other  
factors, apart from the simple change in the amount of the cir-  
culating ACTH influence the contents of ascorbic acid and gluta-  
thione in the brain. 4 Tables, 5 Western, 4 Czech references.  
1/1 (Ms. rec. Mar 66).

PLACKOVA, Z.; WAGNER, J.; HAIS, I.M.

Comparison of the fate of various pyridazine sulfonamides in the animal body. Cesk. farm. 12 no.5:239-242 Je '63.

1. Vyzkumny ustav pro farmacii a biochemii, Praha I ustav lekarske chemie KU, Praha.

|                          |                      |
|--------------------------|----------------------|
| (SULFAMETHOXYPYRIDAZINE) | (SULFAPHENAZOLE)     |
| (SULFADIMETHOXINE)       | (SULFONAMIDES)       |
| (URINE)                  | (FECES) (METABOLISM) |

PLACKOVA, Z.; HATS, I.M.; Technicka spoluprace: LIPOVSKA, M.

Distribution and excretion of the ganglioplegics N,N,1,2,2-pentamethylcyclohexylamine and N,N,2,2,3-pentamethyl-3-butylamine after peroral administration in rats. Cesk. farm. 12 no.5:242-246 Je '63.

(AMINES) (GANGLIONIC-BLOCKING AGENTS)  
(METABOLISM) (URINE) (BLOOD CHEMICAL ANALYSIS)

CZECHOSLOVAKIA

Z. PLACKOVA and I. M. HAYS, Pharmacy and Biochemistry Research Institute  
(Vyzkumny ustav pro farmaci a biochemii,) Prague.

"Distribution and Excretion of Ganglioplegics N,N,1,2,2,-Pentamethylcyclo-  
hexylamine and N,N,2,2,3-Pentamethylbutylamine(3) Given Orally to Rats."

Prague, Ceskoslovenska Farmacie, Vol 12, No 5, June 62; pp 242-246.

Abstract[English summary modified]: After 50 mg./Kg. p.o., highest levels  
were found in the kidneys; then brain liver & heart; very low in plasma.  
Excretion was more rapid with either than with dimecammine or mecanylamine.  
Three structural formulae, 6 tables; 6 Czech (1 unpublished) and 4 West'n  
references.

CZECHOSLOVAKIA

Z. PLACKOVA, J. WAGNER and I. M. HLIZ, Pharmacy and Biochemistry Research Institute and Medicinal Chemistry Department I of Charles University (1. ustav lekarske chemie Karlove University,) Prague.

"Fate of Pyridazine Sulfonamides in the Animal Body."

Prague, Ceskoslovenska Farmacie, Vol 12, No 5, June 63; pp 239-242.

Abstract [English summary modified]: Study of five o-substituted sulfonamidopyridazines: -OCH<sub>3</sub> [Kynex<sup>®</sup>, etc.]; -SCH<sub>3</sub>, -SC<sub>2</sub>H<sub>5</sub>, -SOCH<sub>3</sub> and -SOC<sub>2</sub>H<sub>5</sub>; blood levels and excretion in rats & mice, organ levels in mice, human serum protein binding. Results indicate that the widely used methoxy compound is the best long-acting sulfonamide for its duration of action. Structural formula; 6 graphs; 9 Western and 3 Czech (incl. 1 thesis & 1 patent) references.

[1/1]

PLACKOVA, Z.; HAIS, I.M.; WAGNER, J.

Evaluation of a new sulfonamide with prolonged action. 2-Sulfonamido-5-methoxypyrimidine in the animal organism. Cesk. farm. 11 no.6:296-302 J1 '62.

1. Vyzkumny ustav pro farmacii a biochemii, Praha I. ustav lekarske chemie University Karlovy, Praha.  
(SULFONAMIDES metab)

SIBLIKOVA, O.; CERNA, M.; HAIS, L.M.

Review of some color and fluorescence methods in detecting steroids.  
II. Cesk. farm. 11 no.4:187-191 My '62.

1. Vyzkumny ustav pro farmacii a biochemii, Praha.  
(STERIODS chem) (CHROMATOGRAPHY)



FRANC, Z.; HORESOVSKY, O.; HAIS, I.M.

Studies on anticoagulant substances. XXXVII. Distribution, absorption and excretion of S35 in mice, rats and rabbits after the administration of an anticoagulant 2,2-di 4-hydroxy-3-coumarinyl - diethylsulfide-S35 (Thiotan).

1. Vyzkumny ustav pro farmacie a biochemii, Praha.  
(COUMARINS metab) (SULFUR metab)

HAIS, I.M.; LEDVINOVA, Z.; VACHEK, J.; TRCKA, V.; KONICKOVA, L.

Studies on anticoagulants. XXXVI. The level of 2-(3-chromonyl)-  
2-(4-hydroxy-3-coumarinyl)-diethylsulfide in animals. Cesk. farm.  
11 no.3:113-118 Mr '62.

1. Vyzkumny ustav pro farmacii a biochemii, Praha.  
(SULFIDES metab) (COUMARINS metab)

SIBLIKOVA, O.; CERNA, M.; HAIS, I.M.

Contribution to the metabolism of ketophenylbutazone. II.  
Ketophenylbutazone metabolites in urine. Cesk. farm. 11 no.3:  
123-126 Mr '62.

1. Vyzkumny ustav pro farmacii a biochemii, Praha.  
(PHENYLBUTAZONE rel cpds)

HAIS, Ivo, red.; MATSEK, K., red.; VOL'FSON, B.M.[translator];  
~~HAIS, Ivo, red.~~ ZAPROMETOV, M.N., red.

[Chromatography on paper] Khromatografiia na bumage.  
Pod red. M.N.Zaprometova. Moskva, Izd-vo inostr. lit-ry,  
1962. 851 p. (MIRA 16:8)  
(Paper chromatography)

ZENISEK, A.; KRAL, J. A.; HAIS, I.M.; ROTH, Z.; SKRAMOVSKY, V.; KUTOVA, M.;  
Technicka spoluprace M. Kyselova

Fractional composition of sweat produced by heat and strenuous work.  
III. Effect of previous baths. Cas.lek.cesk 100 no.6:170-175  
10 F '61.

1. Ustav telovychovneho lekarstvi KU v Praze, prednosta prof. dr.  
J. Kral. Vyzkumny ustav pro farmacii a biochemii, reditel inz. dr.  
O. Nemecek. II. ustav lekarsky chemie KU v Praze, prednosta prof.  
dr J. Sula. Vyzkumny ustav chorob revmatickych, prednosta prof.  
dr. Fr. Lenocho.

(SWEAT chem) (BATH)

PAIS, IVO L., ed.

(Paper chromatography. 2d ed. illus.(part col.), bibl., notes, tables).

Praha, Czechoslovakia, 1959.

Monthly list of EAST EUROPEAN ACCESSIONS (SEAI), LC, Vol. 8, No. 7, July 1959, Wash. D. C.

CZECHOSLOVAKIA/ Chemical Technology, Chemical Products and  
Their Application - Medicinals, Vitamins,  
Antibiotics

J-3

Abs Jour : Referat Zhur - Khimiya, No 2, 1958, 5592

Abstract : photolorimetrically (utilizing in the latter instance  
the color reaction with  $H_2SO_4$ ).

Card 2/2

CZECHOSLOVAKIA / Pharmacology. Toxicology.  
Anticoagulants.

V

Abs Jour : Ref. Zhur - Biologiya, No. 3, 1959, 13894

blood is higher; in mice it is comparatively low. In rabbits and dogs, the level of I in the blood did not change with introduction of vitamin K<sub>1</sub>. For determination of I in blood and organs, a method was developed leading to granulation, precipitation of proteins, extraction with an organic solvent, chromatography in a formamidebenzine system and detection by a reaction, that consists of chlorination and subsequent alkalization. II was detected by fluorescence after alkalization. -- A. G. Brusilovskaya

Card 2/2



CZECHOSLOVAKIA / Pharmacology. Toxicology.  
Anticoagulants.

V

Abs Jour : Ref. Zhur - Biologiya, No. 3, 1959, 13894

Author : Hais, I.L.; Ledvinova, Z.

Inst : -

Title : Comparison of Transformations of Desoxypelentan  
and Other Anticoagulants.

Orig Pub : Chemotherapeutika. I. Framac. Sympos., Praha,  
1956, 88-89

Abstract : Of K antivitamins, desoxypelentan (I) and des-  
oxytan (II), like dicoumarin, are anticoagulants  
of prolonged action; pelentan (III) is an anti-  
coagulant of comparatively short action. I and  
II do not split in biologic media; from III,  
saponification and hydroxylation products form.  
In rats, rabbits and dogs, the level of I in the

Card 1/2

HAIS, I. M.

CZECH

✓ A comparison between the blood levels and elimination of *d*-, *l*-, and *dl*-chloramphenicol in laboratory animals. V. Francová-Křimová and I. M. Hais (Výzkumný ústav pro farm. a biochem., Prague). *Časopis Lékařů Českých* 94, 7(9)-16(1955).—A propylene glycol soln. of 150 mg./kg. body wt. of *d*-, *l*-, and *dl*-chloramphenicol (I) was administered to rats and rabbits. The levels of aromatic nitro compds. (II) were higher when the *l* and *dl* form was administered. The excretion of II plus aromatic amino compds. (III) in the urine of rats was highest when the *l* form had been administered. Proportions of III in urine and feces were highest after the administration of the *l* form. Delayed resorption and elimination was observed in dogs to which I had been administered in aq. suspension during chloralose-phenobarbital anesthesia. I, 1-*p*-nitrophenyl-2-amino-1,3-propanediol, and 4 other substances were detected in dog urine, two of which moved anodically on paper ionophoresis and were attributed to glucuronides. No striking difference of the paper chromatographic pattern of metabolites was noted whether *d*-, *l*-, or *dl*-I was administered. The study of the metabolism of I in rats of various age groups did not throw any light on their different susceptibility to the toxic effects of chloramphenicol. I. M. Hais

1. Výzkumný ústav pro farmacii a biochemii v Praze.  
(Chloramphenicol, metabolism) blood level  
& D.L. & D.L. chloramphenicol elimination in rats)

HAISLM.

CZECH

/Paper ionophoresis of 4-hydroxycoumarin derivatives.  
 (by M. Hala (Vědecký ústav farm. biochem., Prague).  
 Chem. Abstr. 49, 700-10 (1955).) Sepa. by paper ionophoresis  
 was carried out with 4-hydroxycoumarin, 3-phenyl-4-hydroxy-  
 coumarin, 3,3'-methylenebis(4-hydroxycoumarin), bis(4-hy-  
 droxycoumarinyl)acetic acid, its Et ester (Pelentan), Am  
 ester, and glycol monester. According to the changes in elec.  
 mobility in dependence on pH, dissoen. of the compds. can  
 be followed, and information about the dissoen. consta. pro-  
 vided. Mono-7-hydroxy deriv. of Pelentan isolated from  
 pig urine seems to be dissoed. in 3 degrees at pH higher  
 than 9. The method permits the estim. of pK of the comp-  
 onents of complex mixts. (urine exts.) without previous  
 isolation. M. Hudlický

A 82

HAIS, I. ;

Paper iontophoresis of some 4-hydroxycoumarin derivatives. p. 706

CHEMICKÉ LISTY (Československá akademie věd. Československá společnost chemická) Praha, Czechoslovakia. Vol. 49, no. 5, May 1955

Monthly List of East European Accessions (EEAI) LC. Vol. 9, no. 1, Jan. 1960  
Uncl.

HAIS, I M

CZECH

✓ Partition chromatography of sulfonamides on paper  
impregnated with a buffer. Dalibor Rybát, Bohumil  
Toušek, and Ivo M. Hais, *Collection Czechoslov. Chem.*  
*Commun.* 20, 724-6 (1955) (in German).—See C.A. 49,  
2031a. R. J. C. (2)

HAIS I.M

✓Sun-screening effect of urocanic acid. A. Ženíšek, J. A. Král, and I. M. Hais (Charles Univ., Sabinovská, Prague). *Biochim. et Biophys. Acta* 18, 530-01(1955); cf. C.A. 48, 2866e.---Comparison of the ultraviolet absorption curve of urocanic acid (I) with a curve relating erythemogenic activity and wave length of the erythemogenic radiation indicates that the absorptive properties of I make it useful as a sun-screening agent. I, though absorbing erythema-producing radiation, transmits the pigment-producing radiations. The normal I concn. in the sweat of 15 subjects was in the range of 40-160  $\mu$ /ml. Morton Pader

FUCIK, K.; HAIS, I. M.; KAKAC, V.; KNOBLOCH, E.; PROCHAZKA, Z.

Chemical characteristics of the main product of anticoagulant pelentan in human urine. Cesk. fysiол. 4 no.3:342-348 1955.

1. Vyzkumny ustav pro farmacii a biochemii, Praha.  
(COUMARIN, derivatives,  
ethyl biscoumacetate, metab. products in urine,  
determ.)  
(URINE,  
ethyl biscoumacetate metab. products, determ.)

5



HAIS, I.M.; MACEK, K.: FRANCOVA, V.

~~unclassified~~  
Paper chromatography and iontophoresis of chloramphenicol and related substances. Cesk.farm. 4 no.3:127-129 Apr 55.

1. Z Vyzkumneho ustavu pro farmacii a biochemii v Praze.  
(CHLORAMPENICOL, determination,  
chromatography, paper, & iontophoresis)  
(ION TRANSFER,  
iontophoresis of chloramphenicol)  
(CHROMATOGRAPHY,  
of chloramphenicol)

Hais, I. M.

## CZECH

Antituberculous factor of milk. A. Šimek, Z. Franc, H. Štědrá, and I. M. Hais (Pharm. Biochem. Research Inst., Prague). *Časopis hyg., epidemiol., mikrobiol., imunol.* 4, 124-7 (1955).—Administration of milk or whey to *Sba* mice infected with *Mycobacterium tuberculosis* (H) prolonged the survival time and reduced the loss of wt. The effective factor passed through a cellophane membrane and was destroyed by boiling or acidification. Whey and its dialysate inhibited *in vitro* the growth of *T* cultivated in modified Krichner medium. L. J. Urbánek.

CZECHOSLOVAKIA/Human and Animal Physiology (Normal and Pathological). Skin

T-14

Abs Jour : Ref Zhur - Biol., No 11, 1958, 51403

Author : Kral, Jiri; Zenisek, Antonin; Hais, Ivo M.

Inst : Carolina University of Prague, Institute of Medicine.

Title : The Significance of Urocanic Acid in Human Sweat for the Protection of the Skin from Ultraviolet Rays.

Orig Pub : Univ. carolina. Med., 1955, Suppl. No 1, 379-384.

Abstract : It has been established that human sweat contains urocanic acid, produced by histidine. This acid causes sweat absorption of ultraviolet (UV) rays in the part of the spectrum (290-310 m $\mu$ ) which produces erythema. The possibility of using this factor in research is discussed, in order to find a substance which would insure artificial skin protection from effects of UV rays. -- A.S. Raben.

Card 1/1

Hais I M

Med. Possible significance of urocanic acid content of sweat for protection against the erythema-producing effect of ultraviolet radiation. A. Zenisek, J. A. Kral, and I. M. Hais (Charles Univ., Prague). *Congr. intern. biochim. Resumes communs.*, 3<sup>e</sup> Congr., Brussels 1955, 124 (in English); cf. C.A. 49, 5410h. The amt. of urocanic acid in sweat greatly exceeds the amts. in other body fluids in man. Since it shows powerful absorption of radiation at 300 mμ, (in the zone of greatest erythema production and cancer production), it may have a role as a natural protection against short-wave solar rays. W. C. Tobie

Hais, I. M.

✓ 533. Partition chromatography of sulphonamides on paper impregnated with a buffer. D. Rybát, B. Toušek and I. M. Hais (Chemopharma, Ústí nad Labem, Czechoslovakia) (*Chem. Listy*, 1954, 48 [10], 1532-1536).—The influence of pH on the separation of a number of sulphonamides by chromatography on paper (Whatman No. 1) impregnated with borate buffers, with *n*-butanol saturated with water as the mobile phase, was investigated. The dissociation of the sulphonamido group at higher pH and the ionisation of the aromatic amino group of the sulphonamides at lower pH leads to a lowering of their  $R_f$  values. The relationship between  $R_f$  or  $R_M$  values and pH is dependent on the pK values of the sulphonamides, but even at extreme values of pH no simple relationship has been established. By choosing a suitable buffer, the separation of sulphonamides by paper partition chromatography is readily achieved.

G. GLASER

(2)

HAIS / M

Note on paper chromatography of estrone and estradiol.  
O. Shalinski, Z. Budnicka, and M. J. H. H. (Verl. 1964/1964).  
In a system: propylene glycol-toluene, 17 $\beta$ -estradiol moves  
more slowly than estrone; the spots being 0.8-1.5 cm., and  
12-13.7 cm., resp., with the front distance being 35 cm.;  
in HCONH<sub>2</sub> and benzene-CHCl<sub>3</sub> system (4:1), the dis-  
tances are 10.5-12.3 cm. and 20-21.7 cm., resp., with the  
front distance 35 cm. The results contradict those of  
Rosenkrantz (C.A. 49, 2354). M. Hudlicky.

HAIS, IVO M.

Chromatographic separation of amino acids in the *tert*-butanol-borate buffer (pH 8.5) system. Ivo M. Hais and Oldřich Horčáková (Výzkumný Ústav Farm. Biochem., Prague, Czech.). *Chem. Listy* 48, 549-51(1954).—Solvent system *tert*-BuOH-borate buffer is used for sepg. those amino acids the sepn. of which in other systems is difficult. The solvent is composed of 85 parts *tert*-BuOH liquefied with 5% H<sub>2</sub>O, and of 15 parts of a buffer (pH 8.5) prepd. by dissolving 4.143 g. H<sub>3</sub>BO<sub>3</sub> and 5.0 g. KCl in 0.5 l. H<sub>2</sub>O, by adding a soln. of complexon III (0.15 g. in 114 ml. 0.1N NaOH), and by bringing the pH to 8.5 with 0.1N NaOH. Detection was carried out by a soln. consisting of 9 parts 0.2% EtOH soln. of ninhydrin with 1 part AcOH. The sepn. of amino acids having low *R<sub>f</sub>* can be improved by repeated development.

M. Hudlické

18-15-54

mf

MACEK, I.,  
HATS, I. M., Paper Chromatography (Czech)



Moist, I. M.

Thin layer chromatography of the amino acids of human  
sweat. (1964) J. Biol. Chem. 239: 1000-1004. (1965) J. Biol. Chem. 240: 1000-1004. (1966) J. Biol. Chem. 241: 1000-1004. (1967) J. Biol. Chem. 242: 1000-1004. (1968) J. Biol. Chem. 243: 1000-1004. (1969) J. Biol. Chem. 244: 1000-1004. (1970) J. Biol. Chem. 245: 1000-1004. (1971) J. Biol. Chem. 246: 1000-1004. (1972) J. Biol. Chem. 247: 1000-1004. (1973) J. Biol. Chem. 248: 1000-1004. (1974) J. Biol. Chem. 249: 1000-1004. (1975) J. Biol. Chem. 250: 1000-1004. (1976) J. Biol. Chem. 251: 1000-1004. (1977) J. Biol. Chem. 252: 1000-1004. (1978) J. Biol. Chem. 253: 1000-1004. (1979) J. Biol. Chem. 254: 1000-1004. (1980) J. Biol. Chem. 255: 1000-1004. (1981) J. Biol. Chem. 256: 1000-1004. (1982) J. Biol. Chem. 257: 1000-1004. (1983) J. Biol. Chem. 258: 1000-1004. (1984) J. Biol. Chem. 259: 1000-1004. (1985) J. Biol. Chem. 260: 1000-1004. (1986) J. Biol. Chem. 261: 1000-1004. (1987) J. Biol. Chem. 262: 1000-1004. (1988) J. Biol. Chem. 263: 1000-1004. (1989) J. Biol. Chem. 264: 1000-1004. (1990) J. Biol. Chem. 265: 1000-1004. (1991) J. Biol. Chem. 266: 1000-1004. (1992) J. Biol. Chem. 267: 1000-1004. (1993) J. Biol. Chem. 268: 1000-1004. (1994) J. Biol. Chem. 269: 1000-1004. (1995) J. Biol. Chem. 270: 1000-1004. (1996) J. Biol. Chem. 271: 1000-1004. (1997) J. Biol. Chem. 272: 1000-1004. (1998) J. Biol. Chem. 273: 1000-1004. (1999) J. Biol. Chem. 274: 1000-1004. (2000) J. Biol. Chem. 275: 1000-1004. (2001) J. Biol. Chem. 276: 1000-1004. (2002) J. Biol. Chem. 277: 1000-1004. (2003) J. Biol. Chem. 278: 1000-1004. (2004) J. Biol. Chem. 279: 1000-1004. (2005) J. Biol. Chem. 280: 1000-1004. (2006) J. Biol. Chem. 281: 1000-1004. (2007) J. Biol. Chem. 282: 1000-1004. (2008) J. Biol. Chem. 283: 1000-1004. (2009) J. Biol. Chem. 284: 1000-1004. (2010) J. Biol. Chem. 285: 1000-1004. (2011) J. Biol. Chem. 286: 1000-1004. (2012) J. Biol. Chem. 287: 1000-1004. (2013) J. Biol. Chem. 288: 1000-1004. (2014) J. Biol. Chem. 289: 1000-1004. (2015) J. Biol. Chem. 290: 1000-1004. (2016) J. Biol. Chem. 291: 1000-1004. (2017) J. Biol. Chem. 292: 1000-1004. (2018) J. Biol. Chem. 293: 1000-1004. (2019) J. Biol. Chem. 294: 1000-1004. (2020) J. Biol. Chem. 295: 1000-1004. (2021) J. Biol. Chem. 296: 1000-1004. (2022) J. Biol. Chem. 297: 1000-1004. (2023) J. Biol. Chem. 298: 1000-1004. (2024) J. Biol. Chem. 299: 1000-1004. (2025) J. Biol. Chem. 300: 1000-1004.

Hais, I. , SVOBODOVA, S., KOSTER, J.

"Paper partition chromatography of the fission products of riboflavin." IV. "Effect of pH and light on solutions of riboflavin." p. 205. (CHEMICKÉ LISTY, Vol. 47, #2, Feb. 1953, Czechoslovakia)

East European Vol. 2, #8  
SO: Monthly List of Russian Accessions, Library of Congress, August 1953, Uncl.

HAIS, Ivo. M.

Chemical "bst.  
Vol. 48  
Apr. 10, 1954  
General and Physical Chemistry

6.  
(2)  
Paper ionophoresis and electrophoresis. Cestmir Micha-  
lec and Ivo M. Hais (Fann. biochem. výzkumný ústav,  
Prague, Czech). Chem. Listy 47, 284-310 (1953).—A re-  
view with 234 references. M. Hudlický

ME  
9-28-54

HAIS, I.M.

Pharmaceuticals - 11

Separation of estrogenic hormones by paper chromatography. O. Zbudovská and I. Hais (Biochem. and Pharma. Research Inst., Prague, Czech.). *Chem. Listy* 46, 307-8 (1952). -- Estriol, estradiol, and estrone were identified by paper chromatography with  $\text{HCONH}_2$  as a stationary phase and  $\text{C}_6\text{H}_6$ ,  $\text{CHCl}_3$ , or their mixts. as a mobile phase and concd.  $\text{H}_2\text{SO}_4$  as a detection reagent. Prepn. of the steroid ext. from human urine is described. M. Hudlický

HALLS, L.A.

Comparison of long-term administration of pelenan and 1,1-bis(4-hydroxy-3-coumarinyl)propanone to rats. I. M. Hall, V. Indka, R. Holubova, Z. Ledvinova, V. Vlachova, V. Gersmann, M. Wenke, A. Burekova, K. Slavis, C. Michalec, and P. Krali (Karlova Univ., Prague, Czech.). *Časopis Labora. Cesky* 41, 1427-33(1958).  
 1,1-bis(4-hydroxy-3-coumarinyl)propanone (I) is more effective than 1,1-bis(4-hydroxy-3-coumarinyl)acetate (II) for suppressing prothrombin formation, and a comparison of their toxicity in rats was carried out. The dose increased for 7 weeks up to 50 mg/kg. and was held const. for another 14 weeks. The mortality was 45% with I and 40% with II. The liver of most survivors was normal. Liver fat, cholesterol, bilirubinemia, glycemia, thymol turbidity test, Takai-Ali reaction, and blood nonprotein N were normal; glycogen was slightly lower in I group than in control. Blood choline esterase activity was reduced 30% by I while II had no significant effect. Herbert Morawetz.

HAIS, I.M.

Paper chromatography of radioactive substances. Cesk. farm. 1 no. 11-  
12:681-704 1952. (CLML 24:1)

KOSTIR, J.V.; RYBAR, D.J.; OULEHLA, B.; HAIS, I.M.; BERAN, M.

Chromatographic determination of ergotamine and ergotoxine. Cesk.  
farm. 1 no. 11-12:621-625 1952. (CLML 24:1)

1. Of the Research Institute for Pharmacy and Biochemistry and of  
Biochemistry of Charles University, Prague.

HAIS, I. M.  
CA

11/13

Anticoagulant substances. IX. Application of paper chromatography in the analysis of 4-hydroxycoumarin derivatives in urine and blood. Ivo M. Hais (United Pharm Works, Prague, Czech.). *Chem. Listy* **45**, 76-81 (1951). *E. C. A.* **44**, 1402f. Paper chromatography in the system  $\text{NH}_4\text{H}_2\text{PO}_4$ -BuOH or octanol was used for the detection and identification of pelentan and dicoumarol and some of their degradation products in blood and urine. A soln. of 1 part 0.4% of 4-nitraniline in 0.33 N HCl, 1 part 1%  $\text{NaNO}_2$ , 1 part 5% soln. of urea or  $\text{H}_2\text{N SO}_3\text{NH}_2$ , and 7 parts water was used as a developer. Procedures for the blood and urine analysis are given and the results discussed.

M. Hudlicky

1951



HAIS, I. M.  
CA

113

Paper chromatography of the degradation products of riboflavin II. Instability of lumichrome Ivo M. Hais and Sylva Svobodova (Charles Univ., Prague, Czech.) *Chem. Listy* **45**, 259 (1951); cf. *C.A.* **43**, 7073. Products of alk. photolysis and oxidative degradation ( $\text{KMnO}_4$ ,  $\text{H}_2\text{O}_2$ ) of lumichrome were subjected to paper chromatography in the system BuOH-AcOH- $\text{H}_2\text{O}$ . M. Hudlický

1951

H.A.S. E.M.

## CZECH

Metabolites of homologs of ethyl bis(4-hydroxy-2-oxo-2H-1-benzopyran-3-yl)acetate (Pelantan) in rabbit urine. I. M. Hall and L. Morávek (United Pharmaceutical Works, Prague). *Biol. Zpr.* 31, 144-51 (1961).--Dicumarol and bis(4-hydroxy-2-oxo-2H-1-benzopyran-3-yl)acetic acid and its esters were administered intraperitoneally to female rabbits. Paper chromatographic studies made on urine revealed that the acid itself as well as its Me and glycol esters remained unchanged, while the Et, Pr, Bu, and Am esters were metabolized to the free acid. Oldrich Sebek.

LA Hais, I. M.

11A

Inhibition of human serum cholinesterase by some 4-hydroxycoumarin derivatives. V. Grossmann, I. M. Hais, and R. Kasalický; (Charles Univ., Prague) *Nature* 163, 276(1950). - Of the esters of bis(1-hydroxy-3-coumarinyl)acetic acid (pelentanic acid) (I) the ethyl ester (Pelentan) (II) has certain advantages over 3,3'-methylenebis(4-hydroxycoumarin) (III) as an anticoagulant. It was found in this investigation that III also has about half the inhibitory effect of II on cholinesterase. Esters of I had inhibitory effects increasing with the length of the esterifying radical over the range C to C<sub>4</sub>. The ethylene glycol ester of I which differs from II by an OH in the esterifying radical has a much lower anticholinesterase activity and is a weaker coagulant than II. The physiol. significance of the inhibition of cholinesterase by these anticoagulants is not known. D. F.

Hais, I. M.

Anticoagulant substances. V. Metabolism of rats after prolonged administration of Pelentan. I. M. Hais and S. Záborský (Výzkumný a kontrolní ústav, Spolá, Prague). *Časopis Lékařů Českých* 89, 1116-20(1950).—Rats were fed, for 140 days, 50 mg. Pelentan/kg. body wt. every 3rd day, later every 8th day. When compared with a control group, a slight but significant increase was observed in nonprotein N in blood. There was an insignificant depression of cholesterolemia and serum cholinesterase activity. No changes were seen in glycemia in fasting animals, in liver glycogen and fat, Takata-Ara reaction, bilirubinemia, tetrabromophenolsulfonophthalein test, and osmotic resistance of red blood cells.

Anthony Zentgraf

HAIS I. M.

KASALICKY B., GROSSMANN V, HAIS I. M.

Inhibice serove cholinesterasy nekterymi derivaty 4-hydroxykumarinu. [Inhibition of serum cholinesterase by certain derivatives of 4-hydroxycoumarin] Cas. lek. cesk. 89:17  
28 Apr 50 p. 487-8.

1. Of the Pharmacological Institute of Charles University  
(Head -- Prof. B. Polak, M.D.), Prague.

CLML 19, 2, Aug 50

HAIS, I.M.

HAIS, I.M.; RABEK, V.

Application of partition chromatography on paper III. Cas.cesk.  
lek. 63 no.23:340-358.15 Dec 50. (CIML 20:5)

1. Of the SPOFA Research and Control Institute, Prague.

HAIS, I. M.  
(6349)

Dept. of Pharmacol., and Chemical Inst., Charles Univ. Prague, Czechoslovakia  
Paper Partition chromatography of riboflavin decomposition products Nature, London  
1949, 163/4150 (768)

Irradiated samples of riboflavin solution have been subjected to chromatography on filter paper using Crammer's technique (Nature, 1948, 161, 349). In addition to residual riboflavin, lumiflavin and lumichrome, yellow fluorescent spots due to two (or more) unidentified products were observed. Commercial injection solutions were analysed by this method, which is claimed to be suitable for following the influence of various conditions on the rate and nature of photolysis.

Slack-Dagenham

SO: Excerpta Medica, Vol. II, No. 12, Sec. II, December 1949

Hais, I-M.

CA

Paper chromatography. I. M. Hais. *Chem. Listy* 42, 125-37(1948).---A review with 83 references. I. M. Hais and V. Rábek. *Ibid.* 43, 80-94(1949).---150 references. M. Hudlický



HAIO, S.

HAIO, S. - Planning and production of waterproof insulation.p.101

SO: Monthly List of East European Accessions List (HMA) 11, Vol 11, No. 11  
November 1952, Incl.

HAINZMANN, Nandor, okleveles gepeszmernok

Questions connected with earth leakage protection. Elektrotechnika  
53 no.10:443-448 '60

1. Villamos Halozati Szolgalat szakosztalyvezetoje.

~~Hainzmann, N.~~  
HAINZMANIV, N.

621.317.784  
✓ 4768. Measuring accuracy of wattmeters with three  
metering systems. N. HAINZMANN. *Elektrotechnika*,  
48, No. 7, 210-14 (1955) in Hungarian.  
Ei With the help of asymmetrical components the  
problems are investigated in the general case when  
neither the supply system nor the load or the metering  
system are symmetrical. After the general theoretical  
treatment, certain special supply system conditions are  
studied. L. GUREV

W 1956

MULLER, V., inz; HAINTE, E., inz.

Maintenance of the mechanization equipment in loading and unloading stations. Zel dop tech 12 no.6:160-161 '64.

HAINTZ, Ervin, inz.

Experience in the establishment of the Technical Education  
Section in Ceska Trebova. Zel dop tech 12 no. 3: 83 '63

ROGOSS, H.; HAINKE, L.

The effect of non-metallic substances on the quality of aluminum castings. Koh lap 95:Suppl.:Ontode 13 no.6:131-142 Je '62.

ERDŐS, László, dr.; KÖLLEGYI, Özlívészter, dr.; HAINCZ, György, dr.;  
HAINCZ, György, dr.

Active and passive immunization against tetanus. Rev. Biol.  
105 no.36:1690-1692 6 3 1961.

1. Országos Kozegészségügyi Intézet; Országos Traumatológiai  
Intézet és a Magyar Népbudapesti Orvostudományi Akadémia.

ROGESS, H.; HAINKE, L.

Influence of nonmetallic materials on the quality of aluminum  
castings. Koh lap 95 no.5:Suppl. 1. Catode. 13 no.5:97-103 My '62.



BEATNIK, K., Ing. CSc.

Study of an intake vortex. Strojiřrenství 17, no.4:53-56, 1968.

1. Research Institute of Water Power and Hydropower, Prague.

HAINDL, Karel, inz., CSc.

Design of a sewage catcher. Vodni hosp 13 no.6:215-216 '63.

1. Vyzkumny ustav vodohospodarsky, Praha.

HAINDL, Karel, inz.

Research on water diversion during the construction of the  
Nechranice Waterworks. Vodni hosp 13 no.5:194-195 '63.

HAINDL, Karel, inz., C.Sc.

Outflow from pipelines and pressure tubing into river.  
Vodni hosp 13 no.2:43-48 '63.

1. Vyzkumny ustav vodohospodarsky, Praha.

HAINDL, Karel, inz., C.Sc.; DOLEZAL, Ludvik, inz.; KRAL, Jindrich

Contribution to the shaft spillway hydraulics. Part 2.  
Vodohosp cas 10 no.4:370-381 '62.

1. Vyzkumny ustav vodohospodarsky, Praha.

HAINDL, Karel, inz., C.Sc.; DOLEZAL, Ludvik, inz.; KRAL, Jindrich

Contribution to the hydraulics of a shaft spillway. Vodohosp cas  
10 no.3:288-314 '62.

1. Vyzkumny ustav vodohospodarsky, Praha.

HAFNDL, K.

Hydroelectric works on the Volga River near Stalingrad. p. 420.

VODNI HOSPODARSTVI. (Ministerstvo energetiky a vodního hospodarství a  
Vedecká technická společnost pro vodní hospodarství) Praha, Czechoslovakia.  
No. 10, Oct. 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 11,  
November 1959.

Uncl.

HAINDL, Karel, kandidat tehnickih nauka

Water hammers in pipes for hydraulic transportation of materials and the use of a system against water hammers. Vodoprivreda Jug 2 no.7/8: 221-222 '59. (EEAI 10:1)

1. Institut za hidraulicka istrazivanja, Prag-Podbaba [Prague]  
(Hydraulics) (Water hammer) (Water pipes)



HAINDL, Karel, ing.

Nonstationary conditions caused by a sudden closing of a fast-closing floodgate in the upper waters of a pipe under pressure. Vodoprivreda (EEAI 10:1)  
Jug 2 no.7/8:214-219 °59.

1. L'Institut de recherches hydrauliques, Prague, Tchechoslovaquie  
(Water pipes) (Sluice gates) (Hydraulics)

HAINDL, Karel

On the calculation of water flowing from a ... toward  
a river bed. St. ... hydraul 6:191-229 '64.

1 Institute of research for Water Management, Prague Podbaba.

HAINDL, Karel, ing., kandidat tehnickih nauka

Contribution to the study of aeration apparatus. Vodoprivreda Jug  
2 no.7/8:175 '59. (EEAI 10:1)

1. Institut za hidraulicka istrazivanja, Prag, Podbaba [Prague]  
(Water)

HATNDL, K.

Translation waves in supercritical flow. p.127.  
(Vodni Hospodarstvi, No. 5, May 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) IC. Vol. 6, No. 9, Sept. 1957. Uncl.

1977, 7.

Technical similarities in scale and of many others, p. 41

1977, 7, 1977 (Hatechid sprava volubelnosti)  
No. 1, Sept. 1976

Praha, Czechoslovakia

East European List (EAL) Library of  
Congress, Vol. 1, No. 1, January 1977

11-11-68

1. *Hydrochelis p. pallidior* n. sp. dipterocarpaceae (fig. 1, 2, 3).  
2. *Hydrochelis p. pallidior* n. sp. dipterocarpaceae (fig. 1, 2, 3).  
3. *Hydrochelis p. pallidior* n. sp. dipterocarpaceae (fig. 1, 2, 3).

**13:** Der Begriff „Anordnungsakt“ ist unrichtig, richtig oder unbekannt ?

HAINL, K.

HAINL, K. Water supply and heights of fall. p. 112.

Vol. 2, No. 4, Apr. 1956

VOJNY HOSPODARSTVI

Praha, Czechoslovakia

TECHNICAL

Go: East European Accessions, Vol. 5, No. 5, May 1960

HAJEC, V.

"Building the foundations and the steel structure of a hall for the manufacture of building elements in Ostrava-Kuncicky." p. 299

POZEMNI STAVBY. Praha, Czechoslovakia, Vol. 7, No. 6, March, 1959

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 9, September, 1959  
Unclass



HAIN, Karel, inz.

Tool for shaping pipe ends by friction. Stroj vyr 13 no.3:  
196-197 Mr '65.

1. Strojtex National Enterprise, Dvur Kralove nad Labem.

Friction forming of tubes

33955  
Z/031/62/000/002/002/003  
D006/D102

ASSOCIATION: Strojtex, závod Dvůr Králové n.L. (Strojtex, Branch plant Dvůr  
Králové n.L.)

Card 2/2

33955  
Z/031/62/000/002/003  
D006/D102

12310  
AUTHOR: Hain, Karel, Engineer  
TITLE: Friction forming of tubes  
PERIODICAL: Strojirenská výroba, no. 2, 1962, 69-70

TEXT: The author describes a new method of closing metal-tube ends, called friction forming, which is based on the same principle as friction welding. The tube end is heated by friction between the rotating stock (minimum peripheral speed 150 m/min) and a carbide-tipped tool, shaped according to the desired tube-end design and lapped to a high finish. The friction produces a temperature up to 880°C at which plastic deformation of the tube-end takes place. A normal lathe-tool holder is used to which the carbide tip (CSN 42 2371 or CSN 99 9916 - S3) is brazed using the CSN 42 2371 copper or brass solder. The tube-end closures produced by this method are gas-tight, have a high-quality surface requiring no further finishing operations, and their strength is practically the same as that of the base metal. The method is applicable to both steel and non-ferrous tubes. There are 3 figures and 2 Soviet-bloc references.

Card 1/2

HAIN, F.

HAIN, F. Countries of the Middle East; building materials. p. 297

Vol. 34, no. 8, Aug. 1956

STAVIVO

TECHNOLOGY

Praha, Czechoslovakia

So: East European Accession Vol. 6, no. 2, 1957

HATNOVIC-LYELNIECH, Nicoline

Research on the calcium and phosphorus in the blood and bones  
of chickens and on their energy metabolism. Plavil'no  
biol. s. zool. 16 no. 4 237-242 1964.

1. Laboratory of Animal Physiology "Vladimir Savitsky" Institute  
of Biology.

HAIMOVICI-HANES, N.  
EXCERPTA MEDICA Sec 15 Vol 13/16 Chest Dis. June 60

1622. TUBERCULOUS ANAL FISTULAS. A CONTRIBUTION TO THE PROBLEM OF NON-SURGICAL TREATMENT - Les fistules anales tuberculeuses. Contribution au problème du traitement non-opératoire - Haimovici-Hanes N. Bucarest - SEM. HOP. PARIS 1959, 35/12 (952-954)

Tuberculous anal fistula is an affection which as a rule cannot be cured with the usual methods of medical treatment. Operation gives good results in some of these cases, but may cause aggravation in others. Seven such cases have been treated with good result with local perifistulous infiltration of tuberculostatic drugs (isoniazid-streptomycin) sometimes with penicillin. At the same time a systemic anti-tuberculous treatment has been administered. The good effects in these cases were still present at the time of writing, 1-2.5 yr. later. The local treatment, which is always free from harmful effects, must be continued for 3-5 months and the systemic treatment for 8-16 months.

(V, 9, 15)

HARMONVICI, Sergio

Observations on the Bos taurus settlements of the  
settlements of the Bronze Age. Arch. St. Jassy 14:13-14, 1961.  
164.

1. Submitted October 20-21, 1961.

HAIMOVICI, Serge

Contributions to the morphologic and zoogeographic study of the  
brown bear in the Rumanian Neolithic. Trav Mus Nat 4 533-539  
'63.



HATMOVICI, S.; NEAMTU, C.

On the presence of the Equus hydruntinus Rep., a species of Pleistocene Equidae,  
in the Rumanian Neolithic period. In French. p. 137.

ANALIZĂ ȘTIINȚIFICĂ. SERIUN A II: ȘTIINȚE NATURALE. Iasi. Rumania.  
Vol. 5, no. 1, 1969.

Monthly List of East European Accessions (MEAT) LC, Vol. 9, no. 1,  
January 1960.  
Encl.

HAIMOVICI, Niculina

Nychthemeral and seasonal energetic metabolism in birds (Khaki-Campbell ducks and drakes). Studii cerc biol anim 14 no.4: 473-484 '62.

1. Comunicare prezentata de V. Ghetie, membru corespondent al Academiei R.P.R. si membru al Comitetului de redactie, "Studii si cercetari de biologie, Seria biologie animala".

NICHITA, G.; HAIMOVICI, Niculina

Comparative studies of basal metabolism in white rats and hamsters (Cricetus). Studii cerc biol anim 14 no.1:7-16 '62.

1. Comunicare prezentata de V. Ghetie, membru corespondent al Academiei R.P.R., si membru al Comitetului de redactie, "Studii si cercetari de biologie; Seria biologie animala."

BARBUTA, R., dr.; SIRBAN, FL., dr.; HAIMOV I, M., dr.; VASILOVICI, R., dr.;  
FILIP, M., dr.

Mannitol. clearance in infants. Pediatria (Bucur) 14 no.1:  
61-64 Ja-F'65.

1. Lucrare efectuata in Clinica de pediatrie, Iasi, si Casa  
copilului (prof. E. Hurmuzache).

HAIMOVICI, Mendel, acad.

Prof. Simon Sanielevici. Gaz mat fiz 69 no. 4:145-148  
Ap '64.

ROMANIA

POPA, S., Dr, BERCOVICI, C., Dr, HAIMOVICI, M., Dr, DIMITERIU, M., Dr, DANDRACHE, Ludmila, Dr, and PETROAE, Olga, Dr. Work performed at the RPR Institute of Hygiene and Public Health (Institutul de Igiena si Sanatate Publica RPR), Iasi Branch (Filiala Iasi) and the Bacau Regional Sanepid (Sanepidul Regional Bacau).

"Concerning In-Hospital Infections Due to Pathogenic Esch. coli."

Bucharest, Microbiologia, Parazitologia, Epidemiologia, Vol 8, No 3, May-Jun 63, pp 237-241.

Abstract [Authors' English summary modified]: Describes an infection with enteropathogenic E. coli 0<sub>25</sub>:L<sub>11</sub> in a maternity hospital and an infection with serotype 0<sub>111</sub>:B<sub>4</sub> in another hospital. Hospital conditions rendered the viral source more active epidemiologically than family foci. No long-term carriers were detected. In-hospital infections of this type spread rapidly among newborns and their prophylaxis is difficult. Includes a bibliography with 21 entries, of which 7 Western, 3 Russian and 11 Rumanian.

HAIMOVICI, M.

Decomposition of Pfaff systems which represent equations  
with partial differentials of the 2d order. Studii mat  
Iasi 13 no.1:15-21 '62.

HAIMOVICI, M., prof.

Decomposition of the continuation of an exterior differential system. Studii mat Iasi 12 no.2: 219-226'61.

1. Membru corespondent al Academiei R.P.R., membru al Comitetului de redactie si redactor responsabil adjunct, "Studii si cercetari stiintifice, Matematica" (Iasi)



HADJOVICI, M.

On the partial prolongations of differential systems. p. 199.

STUDII SI CERCETARI STIINTIFICE. MATEMATICA. Iasi. Romania. Vol. 9, no. 2,  
1958.

Monthly List of East European Accessions (EPAI) LC, Vol. 9, no. 1,  
January 1960.

Uncl.

HAIMOVICI, H.

On the intergration of 2d order equations with partial derivatives by means of differential equations. In French. p. 489.

REVUE DE MATHÉMATIQUES PURES ET APPLIQUÉES. JOURNAL OF PURE AND APPLIED MATHEMATICS. (Academia Republicii Populare Romine) Bucuresti. Rumania. Vol. 2, 1957.

Monthly List of East European Accessions (EASL LC Vol. 9, no. 1, January 1960.

UNCL

Reducible Differential Systems (Differential Equations)

6581:

Halmovici, M. Systèmes différentiels à caractère réductible. Com. Acad. R. P. Rouine 6 (1956), 975-980. (Romanian. Russian and French summaries)

In a previous paper [#6580] the author considered differential systems of genus 2, and proved a result which constitutes a generalization of the method of Darboux for integrating partial differential equations of the second order in two independent variables. The present note announces the corresponding result for systems of genus  $p$ , which is to be published in detail later.

J. B. Diaz (College Park, Md.)

2  
1-FW

HAJOSZKI, Mendol

"Quelques proprietes des elements integraux d'un systeme de "P" au "I" ordre.  
"Revue de Mathematiques Pures et Appliquees, Vol I, No. I, 1966

HAIMOVICI, Mendel

Haimovici, Mendel. Quelques propriétés des éléments  
intégraux d'un système de Pfaff du I<sup>er</sup> genre. Acad.  
Roum. Sci. Ser. Sci. Mat. Fiz. 7 (1955), 391-394. (Romanian, Russian and French  
summaries)

Haimovici, M. Quelques propriétés du prolongement d'un  
système de Pfaff du II<sup>e</sup> genre. Acad. R. P. Roum. Sci.  
Ser. Sci. Mat. Fiz. 7 (1955), 583-594. (Romanian,  
Russian and French summaries)

If  $\theta_1 = \dots = \theta_n = 0$  is a linear Pfaffian system and  $\theta_i'$  are  
the derived forms of the left members, then  $\theta_i'$  are con-  
gruent modulo the system to forms  $\omega_i = \sum_{j=1}^n a_{ij} \omega_j$ , where  
 $\omega_1, \dots, \omega_n$  are a set of  $n$  linearly independent  
linear forms,  $n$  being the number of independent variables.  
The present two papers consider the case where  $\omega_i =$   
 $\omega_i(x_1, \dots, x_n)$  are the  $\omega_i$ 's and  $a_{ij}$ 's being linear. Numerous  
formal results about so-called reducing Pfaffian systems  
are given. Generalizations and applications to the study  
of the solution of the original Pfaffian system are pro-  
mised.

J. M. Thomas (Durham, N.C.)

Haimovici, Mendel. On some properties of the integral elements of a Pfaffian system of  
the second kind

Haimovici, M.: Some properties of the prolongation of a Pfaffian system of the second  
kind

Reducible Pfaff Systems of Genus 2. (Differential Equations)<sup>16</sup>

6580:

Haimovici, M. Systèmes Pfaff du II-e genre, à caractère réductible. Acad. R. P. Roum. Fil. Cluj. Stud. Cerc. Ști. Ser. I. 6 (1955), no. 3-4, 17-25. (Romanian. Russian and French summaries)

"In this note the author considers a Pfaff system of genus II and kind I. Sufficient conditions for the reduction of the character of the system are studied together with the method of effectively reducing the character when these conditions are satisfied. In the cases in which this character reduces to one, the integration reduces to that of a system of ordinary differential equations." (From the introduction of the author)

R. Blum (Saskatoon, Sask.)

2  
I-F/W

HAIMOVICH, M.

Haimovich, M. Sur le prolongement partiel d'une fonction d'ordre II-ème genre. Acad. R. P. Roumaine. Bul. Lab. Sci. Math. Sci. 6 (1955), 91-104. (Romanian, Russian and French summaries)

Haimovich, M. Sur le prolongement des équations de II-e ordre à une fonction inconnue de deux variables indépendantes et sur les transformations de ces équations. An. Sti. Univ. "Al. I. Cuza" Iasi, Sect. I (N.S.) 1 (1955), 69-136. (Romanian, Russian and French summaries)

1-FW

5m  
conf

Haimovici, M.

Haimovici, M. Remarques sur les six familles de courbes  
sur une surface étudiées dans la note précédente par  
l'acad. Gr. C. Moisil. Gaz. Mat. Fiz. Ser. A. 7 (1955),  
295-297. (Romanian. Russian and French summa-  
ries)

J. - P/W

MS  
Snow



Handwritten signature: *Paul*

HAIMOVICI, M.

Mathematical Reviews  
Vol. 15 No. 1  
Jan. 1954  
Analysis

\*Halmovici, Mendel. Sur l'intégration des systèmes de deux équations aux dérivées partielles du 1-er ordre à deux fonctions inconnues de deux variables indépendantes. Comptes Rendus du Premier Congrès des Mathématiciens Hongrois, 27 Août-2 Septembre 1950, pp. 585-590. Akadémiai Kiadó, Budapest, 1952. (Hungarian and Russian summaries) (2)

Es handelt sich um die Verallgemeinerung der Darboux-schen Integrationsmethode auf Systeme zweier partieller Differentialgleichungen in zwei abhängigen und zwei unabhängigen Veränderlichen. Die Werte der vier ersten Ableitungen der beiden unbekannten Funktionen  $u$  und  $v$  nach den unabhängigen Veränderlichen  $x$  und  $y$  erscheinen als Koeffizienten eines mit dem gegebenen System äquivalenten Pfaffschen System zweier Gleichungen in vier Veränderlichen. Jedem Integrallinienelement  $E_1$  des Pfaffschen Systems entspricht ein zweidimensionales Integrallinienelement  $E_2$  gebildet aus  $E_1$  und einem zweiten zu  $E_1$  involutorischen Integrallinienelement. Aus dem Verschwinden der bilinearen Kovarianten der Pfaffschen Gleichungen gewinnt der Verfasser zwei weitere Pfaffsche Gleichungen, deren Koeffizientenmatrix für nichtcharakteristische Richtungen den Rang 2 hat. Für charakteristische Richtungen vermindert sich dieser Rang. Diese Rangeigenschaften liegen der weiteren Entwicklung der Integrationstheorie zu Grunde.

M. Pinl (Dacca).

2.1.1.2. This system of linear equations is  $\mathcal{O}(n^2)$  with respect to  $n$ , the number of nodes. The condition number of the system can be in violation of assumptions (i) the value of  $\alpha$  forms with a set of Steffan, linear dependent, all the inequality elsewhere.

# W. H. Auden's *Barter* and *Ch...*